

CLAIMS

What is claimed is:

1. A system for generating an audio package containing an audio segment to be played by a gateway in a network, the system comprising:

- 5 (a) an audio database for storing audio segments containing announcements to be played to an end user in a network; and
- (b) an audio package builder/export tool for accessing the audio database to build an audio package including an audio segments file for storing an audio segment to be played by a gateway in the network and an index file containing information usable by the gateway for locating the audio segment in the audio segments file.
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2. ~~The system of claim 1 wherein the audio package includes a catalog file containing information describing the audio segment in the audio segments file.~~

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3. The system of claim 1 wherein the audio package builder/export tool is adapted to select audio segments from the audio database to be included in the audio segments file based on selections received from a user.

4. The system of claim 3 wherein the audio package builder/export tool includes a graphical user interface configured to receive the selections from the user through a web browser.

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5. The system of claim 1 comprising means for exporting the audio package to a plurality of gateways in the network.

6. The system of claim 5 wherein the means for exporting includes means for exporting the audio package over a packet-based network.

7. The system of claim 5 wherein the means for exporting includes means for storing the audio package on a disk or memory storage medium.

5 8. The system of claim 7 wherein the means for exporting includes means for transmitting the audio package to a client over a packet-based network and means for transmitting the audio package from the client to a plurality of gateways.

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10 9. ~~A system for building an audio package, the system comprising,~~  
(a) an audio database for storing audio segments containing announcements to be played to an end user in a network; and  
(b) an audio package builder/export tool for allowing a user to select, from the audio database, an audio segment to be played by a gateway and for building an audio package containing the audio  
15 ~~segment selected by the user.~~

10. The system of claim 9 wherein the audio package builder/export tool is configured to present a graphical user interface to the user over a network for receiving user selections.

11. The system of claim 10 wherein the audio package builder/export  
20 tool is configured to present the graphical user interface through a web browser executing on a client computer.

12. The system of claim 9 wherein the audio package includes an audio segments file containing the audio segment selected by the user and an

- index file containing information usable by gateways for locating audio the audio segment in the audio segments file.

5 13. The system of claim 9 wherein the audio package includes a catalog file containing descriptive information relating to the audio segment selected by the user.

14. The system of claim 9 comprising means for exporting the audio package to a plurality of gateways.

15. The system of claim 14 wherein the means for exporting includes means for exporting the audio package over a packet-based network.

10 16. The system of claim 14 wherein the means for exporting includes means for storing the audio package on a disk or memory storage medium.

15 17. The system of claim 14 wherein the means for exporting includes means for transmitting the audio package to a client over a packet-based network and means for transmitting the audio package from the client to a plurality of gateways.

18. A data structure embodied in a computer-readable medium usable by a gateway for locating an audio segment in an audio segments file to play the audio segment to an end user in a network, the data structure comprising:

20 at least one record containing information regarding an audio segment in the audio segments file, the record including:

- (i) a first data field for storing an audio identifier for identifying the audio segment in the audio segments file; and

- (ii) a second data field for storing information regarding a location of the audio segment in the audio segments file.

5 19. The data structure of claim 18 wherein the second data field stores an offset indicating a location of the audio segment from an initial address of the audio segments file.

20. The data structure of claim 19 comprising a third data field for storing information indicating a length of the audio segment.

21. The data structure of claim 18 comprising a third data field for synchronizing the record with the audio segment in the audio segments file.

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22. ~~A data structure embodied in a computer-readable medium for storing an audio segment containing an announcement to be played by a gateway in a network, the data structure comprising:~~

- 15 (a) a first section for storing an audio segment containing an announcement to be played by a gateway in a network; and  
(b) a second section for storing information indicating the number of audio segments in the first section.

23. The data structure of claim 22 comprising a third section for storing check data for synchronizing the audio segment with a record in an index file usable by the gateway to locate the audio segment in the first section.

20 24. The data structure of claim 22 wherein the first section includes a plurality of audio segments at locations corresponding to offset values in an index file usable by the gateway to locate the audio segments in the first section.

25. ~~A method for distributing audio data to a gateway in a network,~~  
the method comprising:

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- (a) receiving a request from a user for selecting an audio segment containing an announcement to be played by a gateway in a network;
  - (b) generating an audio package including the audio segment selected by the user; and
  - (c) ~~exporting the audio package to the gateway.~~

10 26. The method of claim 25 wherein receiving the request includes receiving a request generated by a web browser.

27. ~~The method of claim 25 wherein generating an audio package~~  
includes generating an audio segments file containing the audio segment selected by the user and an index file containing information for locating the audio segment in the audio segments file.

15 28. The method of claim 25 wherein generating an audio package includes generating a catalog file containing descriptive information regarding ~~the audio segment selected by the user.~~

20 29. The method of claim 25 comprising exporting the audio package to a plurality of gateways to ensure consistent delivery of announcements by the gateways.

30. ~~A method for building an audio package including an audio-~~  
segment containing an announcement to be played by a gateway in a ~~telecommunications network, the method comprising:~~

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- (a) ~~storing, in an audio database, audio segments to be played to~~  
an end user in a network; and
- (b) ~~generating an audio package including a subset of the audio~~  
~~segments in the audio database.~~

5           31. The method of claim 30 wherein generating an audio package includes generating an audio segments file containing the subset of audio segments and an index file containing information for locating audio segments in the audio segments file.

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10           32. ~~The method of claim 31 wherein generating an audio package~~  
~~includes generating a catalog file including records containing information~~  
~~describing the audio segments in the audio segments file.~~

33. The method of claim 30 further comprising exporting the audio package to a plurality of gateways in the network.

15           34. The method of claim 33 wherein exporting the audio package to a plurality of gateways includes transmitting the audio package over a packet-based network.

20           35. The method of claim 33 wherein exporting the audio package to a plurality of gateways includes transmitting the audio package to a client computer and forwarding the audio package from the client computer to the plurality of gateways.

36. The method of claim 30 further comprising receiving requests from a user including audio identifiers indicative of audio segments to be included in the audio package and wherein generating the audio package

includes extracting audio files from the audio database based on the audio identifiers.

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37. A method for provisioning audio on a gateway comprising:

- (a) storing a first audio package definition in an audio database, the first audio package definition containing information sufficient to allow creation of a first audio package containing audio to be played a gateway; and
- (b) in response to a first user request, accessing the audio database, locating the first audio package definition, creating the first audio package based on the definition, and exporting the audio package from the audio database.

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38. The method of claim 37 wherein storing a first audio package definition includes storing an audio package definition including a plurality of audio identifiers representing audio segments in the audio database.

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39. The method of claim 37 comprising, in response to a second user request, locating the first audio package definition, modifying the first audio package definition based on the second user request, creating a second audio package based on the modified package definition, and exporting the second audio package from the audio database.

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40. The method of claim 39 comprising storing the modified audio package definition in the audio database.

41. An audio package for storing an announcement to be played by a gateway in a network, the audio package being embodied in a signal propagated over the network, the audio package comprising:

- (a) an audio segments file containing an audio segment to be played by a gateway in the network; and
- (b) an index file containing information usable by the gateway to play the audio segment.

5            42. The audio package of claim 41 comprising a catalog file containing information describing the audio segment in the audio segments file.

            43. The audio package of claim 41 wherein the index file contains information specifying the location of the audio segment in the audio segments file.

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